

METHOD FOR MANUFACTURING FAUCET SPOUTS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a method, and more
5 particularly to a method for manufacturing faucet spouts.

2. Description of the Prior Art

Various kinds of typical faucet spouts have been developed for
attaching to faucet devices, and comprise a water passage formed
therein for allowing water to flow out of the faucet spouts.

10 For example, U.S. Patent No. 6,561,210 to Hsieh et al. shows
one of the typical faucet spouts which are normally manufactured or
formed by die casting processes.

However, the typical faucet spouts that are manufactured or
formed by die casting processes may include a serrated or uneven or
15 rough water passage formed therein, due to the die casting processes.
In addition, the water passage is deeply formed within the faucet
spouts and may not be machined into smooth surfaces, such that the
water may not flow swiftly out of the faucet spouts.

In addition, the water passage of the faucet spouts may be
20 partially blocked by objects that are provided for forming the dies
used for die casting processes. Furthermore, the serrated or uneven
or rough water passage of the faucet spouts manufactured or formed
by die casting processes may have heavy metals or other poisonous
materials released into the water flowing through the water passage
25 of the faucet spouts.

U.S. Patent No. 3,448,768 and U.S. Patent No. 4,513,769 to
Purcell disclose two further typical faucet spouts which normally

include a number of parts or elements formed separately, and then assembled together with fasteners. However, the assembling of the parts or elements of the faucet spouts may have a good chance to damage the faucet spouts, and may spoil the outer appearance of the
5 faucet spouts.

The present invention has arisen to mitigate and/or obviate the afore-described disadvantages of the conventional methods for manufacturing faucet spouts.

SUMMARY OF THE INVENTION

10 The primary objective of the present invention is to provide a method for manufacturing faucet spouts without forming many parts or elements separately, and without assembling many parts or elements together, and without die casting processes.

In accordance with one aspect of the invention, there is
15 provided a method for manufacturing faucet spouts comprising forming a tubular member to have a smooth inner peripheral surface formed therein, and forming an outer covering member onto an outer peripheral portion of the tubular member, to have a smooth outer peripheral surface formed on the outer covering member. The
20 faucet spouts may thus be manufactured with a greatly reduced cost, and a greatly simplified manufacturing process.

An insert may further be applied or attached or secured onto the tubular member, and arranged between the tubular member and the outer covering member. The insert is preferably made of
25 recycled materials.

The tubular member is made of materials selected from plastic materials, copper materials, stainless steel materials. The outer

covering member is made of materials selected from synthetic materials, copper materials, tin materials, stainless steel materials, titanic materials.

Further objectives and advantages of the present invention will become apparent from a careful reading of the detailed description provided hereinbelow, with appropriate reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partial cross sectional view of a faucet spout to be manufactured with a method in accordance with the present invention; and

FIG. 2 is a partial cross sectional view similar to FIG. 1, illustrating the other arrangement of the faucet spout to be manufactured with the method in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, and initially to FIG. 1, a method in accordance with the present invention is provided for forming or manufacturing a faucet spout 20 without forming many parts or elements separately, and without assembling many parts or elements together, and without die casting processes.

In manufacturing a faucet spout 20 in accordance with the present invention, a tubular member 21 may first be made of various materials, such as plastic materials, copper materials, stainless steel materials, etc., and may be formed by such as molding processes, bending or forging processes, mold extruding processes, mold injecting processes, etc.

It is to be noted that the tubular member 21 is only required to have a smooth inner peripheral surface 23, but not necessarily be formed with a smooth outer peripheral surface. Accordingly, the tubular member 21 may be easily bent, forged, or machined to various shapes or curvatures or configurations, etc., without caring about the outer appearance thereof.

An outer covering member 22 may then be formed or applied onto the outer peripheral portion of the tubular member 21 by such as molding processes, mold extruding processes, mold injecting processes, etc., and may be easily formed with a level and smooth outer appearance (FIGS. 1, 2).

It is to be noted that the outer covering member 22 is only required to have a smooth outer peripheral surface 25, but not necessarily be formed with a smooth inner peripheral surface. Accordingly, the outer covering member 22 may be easily formed or molded into various shapes or curvatures or configurations, etc., without caring about the inner appearance thereof.

For example, when the inner tubular member 21 is made of plastic materials, it is preferable that the outer covering member 22 is made of synthetic materials, resin materials, or the like.

Alternatively, when the inner tubular member 21 is made of copper materials, it is preferable that the outer covering member 22 is made of synthetic materials, resin materials, copper or tin materials, or the like.

Further alternatively, when the inner tubular member 21 is made of stainless steel materials, it is preferable that the outer covering member 22 is made of metal or stainless steel materials,

titanic materials, or the like.

As shown in FIG. 1, an insert 24 may be formed or applied or attached onto the outer peripheral portion of the tubular member 21 by such as molding processes, mold extruding processes, mold
5 injecting processes, etc., before the outer covering member 22 is formed or applied onto the outer peripheral portion of the tubular member 21, to have the insert 24 to be retained or secured between the outer covering member 22 and the tubular member 21.

The insert 24 is not required to have a smooth inner and outer
10 peripheral surfaces, such that the insert 24 may be formed or made of various waste or recycled materials, in order to reduce the materials of the outer covering member 22 that are normally expensive.

It is to be noted that the tubular member 21 is not required to
15 have a smooth outer peripheral surface, and the outer covering member 22 is not required to have a smooth inner peripheral surface 25, such that the faucet spout 20 may be easily and quickly formed or manufactured to have a smooth inner peripheral surface and a smooth outer peripheral surface, such that the faucet spout 20 may
20 be manufactured with a greatly reduced cost. In addition, the insert 24 may be made of waste or recycled materials, such that the manufacturing cost of the faucet spout 20 may further be greatly reduced.

Accordingly, the method in accordance with the present
25 invention may be used for manufacturing faucet spouts without forming many parts or elements separately, and without assembling many parts or elements together, and without die casting processes.

Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination
5 and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.